

=> s 12

L3 2 L2

=> d 1-2 bib abs hitstr

L3 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:638846 CAPLUS

DN 143:153295

TI Preparation of diarylmethylidenylpiperidines for the management of pain

IN Brown, William; Griffin, Andrew; Walpole, Christopher

PA Astrazeneca AB, Swed.

SO PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DT Patent

LA English

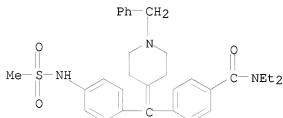
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|------------------|----------|
| PI | WO 2005066128 | A1 | 20050721 | WO 2005-SE13 | 20050105 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| | RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | AU 2005204009 | A1 | 20050721 | AU 2005-204009 | 20050105 |
| | CA 2552850 | A1 | 20050721 | CA 2005-2552850 | 20050105 |
| | EP 1706380 | A1 | 20061004 | EP 2005-704687 | 20050105 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR, IS | | | | |
| | CN 1926105 | A | 20070307 | CN 2005-80006251 | 20050105 |
| | BR 2005006707 | A | 20070502 | BR 2005-6707 | 20050105 |
| | JP 2007517872 | T | 20070705 | JP 2006-549189 | 20050105 |
| | IN 2006DN03735 | A | 20070420 | IN 2006-DN3735 | 20060629 |
| | MX 2006PA07662 | A | 20060904 | MX 2006-PA7662 | 20060703 |
| | NO 2006003617 | A | 20061009 | NO 2006-3617 | 20060809 |
| PRAI | SE 2004-25 | A | 20040109 | | |
| | WO 2005-SE13 | W | 20050105 | | |
| OS | CASREACT 143:153295; MARPAT 143:153295 | | | | |
| GI | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [R1 = (un)substituted aryl, heteroaryl; R2 = alkyl, H; R3 = H, COR4, SO2R4, etc.; R4 = H, alkyl, alkenyl, etc.] and their pharmaceutically acceptable salts were prepared. For example, N-acetylation of aniline II (R2 = H) with acetic anhydride afforded the TFA salt of diarylmethylidenylpiperidine II (R2 = COCH3) in 100% yield. In human

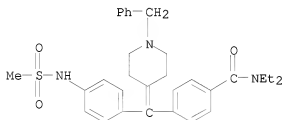
5 receptor assays, certain examples of compds. I exhibited IC50 values ranging from 0.22-2.34 nM, with an average of 0.98 nM (sic).
 IT 859911-50-5P, 4-[(1-Benzylpiperidin-4-ylidene)[4-[(methylsulfonyl)amino]phenyl]methyl]-N,N-diethylbenzamide
 859911-51-6P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of diarylmethylidenepiperidines for the management of pain)
 RN 859911-50-5 CAPLUS
 CN Benzamide, N,N-diethyl-4-[[4-[(methylsulfonyl)amino]phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)



RN 859911-51-6 CAPLUS
 CN Benzamide, N,N-diethyl-4-[[4-[(methylsulfonyl)amino]phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 859911-50-5
 CMF C31 H37 N3 O3 S



CM 2

CRN 76-05-1
 CMF C2 H F3 O2



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:606467 CAPLUS

DN 141:157038

TI Preparation of 4-[3-(sulfonylamino)phenyl-1-(cyclylmethyl)piperidin-4-ylidenemethyl]benzamide derivatives as delta opioid receptor ligands

IN Brown, William; Griffin, Andrew; Walpole, Christopher

PA Astrazeneca Ab, Swed.; Astrazeneca UK Limited

SO PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DT Patent

LA English

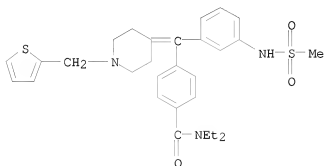
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| PI WO 2004063193 | A1 | 20040729 | WO 2004-GB61 | 20040113 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ | | | | |
| EP 1590346 | A1 | 20051102 | EP 2004-701628 | 20040113 |
| EP 1590346 | B1 | 20061025 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| JP 2006515352 | T | 20060525 | JP 2006-500189 | 20040113 |
| AT 343571 | T | 20061115 | AT 2004-701628 | 20040113 |
| ES 2274415 | T3 | 20070516 | ES 2004-701628 | 20040113 |
| US 20060148850 | A1 | 20060706 | US 2005-541664 | 20050707 |
| PRAI SE 2003-104 | A | 20030116 | | |
| WO 2004-GB61 | W | 20040113 | | |
| OS MARPAT 141:157038 | | | | |
| GI | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [R1 = aryl, heteroaryl, etc.; R2-5 = H, alkyl, cycloalkyl, etc.] are prepared For instance, 4-[bromo(4-carboxyphenyl)methylene]piperidine-1-carboxylic acid tert-Bu ester (preparation given) is converted to the diethylamide (CH2Cl2, i-BuO2CCl, HNet2), deprotected (CH2Cl2, TFA), alkylated with thiophene-2-carboxaldehyde (1,2-dichloroethane, NaHB(OAc)3), coupled to m-aminobenzeneboronic acid (PhMe/EtOH/H2O, Pd(PPh3)4, Na2CO3) and finally treated with methanesulfonic anhydride to give II. Compds. of the invention have IC50 in the range of 0.18 - 0.56 nM for the δ -opioid receptor. I are useful in the management of

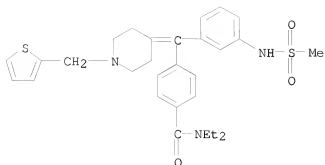
pain.
 IT 728917-19-9P, N,N-Diethyl-4-[[3-[(methylsulfonyl)amino]phenyl][1-(thien-2-ylmethyl)piperidin-4-ylidene]methyl]benzamide
 728917-20-2P 728917-21-3P 728917-22-4P,
 N,N-Diethyl-4-[[1-(2-furanylmethyl)-4-piperidinylidene][3-[(methylsulfonyl)amino]phenyl]methyl]benzamide 728917-23-5P,
 N,N-Diethyl-4-[[1-(phenylmethyl)-4-piperidinylidene][3-[(methylsulfonyl)amino]phenyl]methyl]benzamide 728917-24-6P
 728917-25-7P, N,N-Diethyl-4-[[3-[(methylsulfonyl)amino]phenyl][1-(3-pyridinylmethyl)-4-piperidinylidene]methyl]benzamide
 728917-26-8P 728917-30-4P 728917-31-5P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of 4-[3-(sulfonylamino)phenyl-1-(cyclylmethyl)piperidin-4-ylidenemethyl]benazamide derivs. as delta opioid receptor ligands)
 RN 728917-19-9 CAPLUS
 CN Benzamide, N,N-diethyl-4-[[3-[(methylsulfonyl)amino]phenyl][1-(2-thienylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)



RN 728917-20-2 CAPLUS
 CN Benzamide, N,N-diethyl-4-[[3-[(methylsulfonyl)amino]phenyl][1-(2-thienylmethyl)-4-piperidinylidene]methyl]-, 2,2,2-trifluoroacetate (2:3) (CA INDEX NAME)

CM 1

CRN 728917-19-9
 CMF C29 H35 N3 O3 S2



CM 2

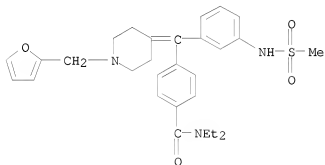
CRN 76-05-1

CMF C2 H F3 O2



RN 728917-21-3 CAPLUS

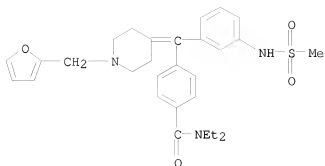
CN Benzamide, N,N-diethyl-4-[[1-(2-furanylmethyl)-4-piperidinyldene]3-
 [(methanesulfonyl)amino]phenyl)methyl]-, hydrochloride (5:6) (CA INDEX
 NAME)



●6/5 HCl

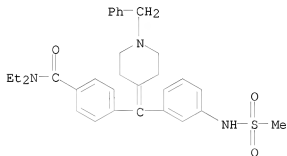
RN 728917-22-4 CAPLUS

CN Benzamide, N,N-diethyl-4-[[1-(2-furanylmethyl)-4-piperidinyldene]3-
 [(methanesulfonyl)amino]phenyl)methyl]- (CA INDEX NAME)



RN 728917-23-5 CAPLUS

CN Benzamide, N,N-diethyl-4-[[3-[(methylsulfonyl)amino]phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)



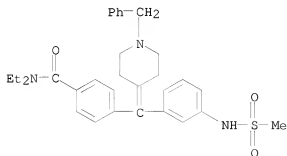
RN 728917-24-6 CAPLUS

CN Benzamide, N,N-diethyl-4-[[3-[(methylsulfonyl)amino]phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]-, 2,2,2-trifluoroacetate (10:13) (CA INDEX NAME)

CM 1

CRN 728917-23-5

CMF C31 H37 N3 O3 S



CM 2

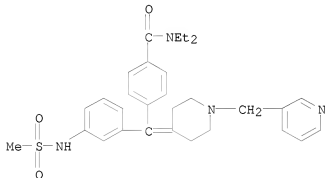
CRN 76-05-1

CMF C2 H F3 O2



RN 728917-25-7 CAPLUS

CN Benzamide, N,N-diethyl-4-[[3-[(methylsulfonyl)amino]phenyl][1-(3-pyridinylmethyl)-4-piperidinylidene]methyl]- (CA INDEX NAME)



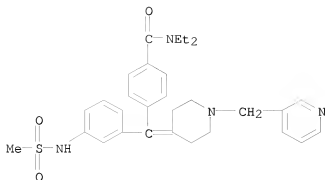
RN 728917-26-8 CAPLUS

CN Benzamide, N,N-diethyl-4-[[3-[(methylsulfonyl)amino]phenyl][1-(3-pyridinylmethyl)-4-piperidinylidene]methyl]-, 2,2,2-trifluoroacetate (2:5)
(CA INDEX NAME)

CM 1

CRN 728917-25-7

CMF C30 H36 N4 O3 S



CM 2

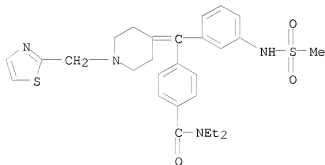
CRN 76-05-1

CMF C2 H F3 O2



RN 728917-30-4 CAPLUS

CN Benzamide, N,N-diethyl-4-[[3-[(methanesulfonyl)amino]phenyl][1-(2-thiazolylmethyl)-4-piperidinyldene]methyl]- (CA INDEX NAME)



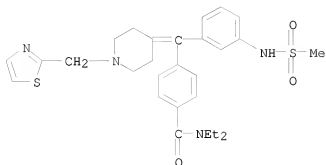
RN 728917-31-5 CAPLUS

CN Benzamide, N,N-diethyl-4-[[3-[(methanesulfonyl)amino]phenyl][1-(2-thiazolylmethyl)-4-piperidinyldene]methyl]-, 2,2,2-trifluoroacetate (2:5) (CA INDEX NAME)

CM 1

CRN 728917-30-4

CMF C28 H34 N4 O3 S2



CM 2

CRN 76-05-1

CMF C2 H F3 O2



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L3 FILE 'CAPLUS' ENTERED AT 07:41:54 ON 27 MAY 2008
2 S L2